TDB Trends Research (Research & Summary for May 2020)

Decline in production activities continued in domestic economy

 \sim Rapid economic contraction has come to a halt, but global economic outlook is a cause for concern \sim

(Companies researched: 23,675; Valid responses: 11,979; Response rate: 50.6%; Survey start date: May 2002)

< Overview of May 2020: Recession phase >

The economic diffusion index (DI) in May 2020 was 25.2, down 0.6 points from the previous month, worsening for the eighth consecutive month. Rapid contraction of the domestic economy came to a halt, but production activities continued to decline.

< Future outlook: Recession continues >

The recessionary trend is expected to temporarily stop, while there are domestic and foreign matters of concern.

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By industry : Five of the ten industries deteriorated. Lowest-ever economic DI was recorded in seven business categories.

By size : Decline in all sizes for the eighth consecutive month, while creating new demands.

By region : Nine of the ten regions, and 33 prefectures deteriorated, with the impact of reduced movement of people and goods.



*: Economic DIs are calculated based on the structural ARIMA model, in which economic statistics are incorporated to the ARIMA model.

	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Ratio to tHM PrFDious Month
Total	45.4	45.1	44.6	44.7	45.0	43.9	43.6	42.5	41.9	38.7	32.5	25.8	25.2	▲ 0.6
Large Firms	48.8	48.7	47.7	47.9	48.0	47.1	47.0	45.7	45.3	42.0	34.8	28.2	28.1	▲ 0.1
Small to Medium-sized Firms	44.6	44.2	43.9	43.9	44.2	43.2	42.8	41.7	41.1	38.0	32.0	25.3	24.6	▲ 0.7
Micro Firms	44.5	44.1	43.8	44.2	45.1	43.9	43.5	42.1	41.4	38.8	32.3	25.4	24.6	▲ 0.8

		May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Ratio to tHM PrFDious Month
Agriculture,Forest	ry,Fisheries	40.5	43.2	39.1	41.5	41.8	42.3	42.5	41.7	38.4	37.9	32.8	28.2	25.1	▲ 3.1
Finance		44.7	44.8	45.1	44.7	45.8	45.4	46.8	44.5	44.8	42.2	33.3	27.3	28.7	1.4
Construction		51.7	51.6	51.7	52.1	53.1	52.1	52.2	51.6	50.0	47.8	41.5	33.9	33.5	▲ 0.4
Real Estate		47.6	48.3	47.4	46.5	48.0	45.9	46.0	44.2	45.9	42.0	31.6	21.9	23.5	1.6
	Food,BEWerages,Livestock Feed	41.3	40.3	40.4	41.1	39.8	39.1	39.7	39.9	38.0	34.5	28.4	24.8	24.6	▲ 0.2
	Textile, Textile Products, Clothing	36.6	36.5	36.4	36.9	36.3	36.1	34.6	32.6	30.5	29.3	23.2	16.7	17.7	1.0
	Construction Materials,Furniture, Ceramics,Stone and Clay Products	45.4	43.5	43.8	45.2	44.1	44.8	43.8	40.2	39.9	37.2	33.4	29.2	26.5	▲ 2.7
	Pulp, Paper and Paper Products	43.0	41.7	39.6	42.3	42.8	40.2	41.7	40.6	37.3	32.0	29.2	24.0	21.4	▲ 2.6
Manufacturing	Publishing,Printing	34.3	33.9	32.5	33.1	34.1	33.0	32.7	32.9	30.9	29.7	23.1	16.8	14.4	▲ 2.4
	Chemical	43.9	42.5	41.9	41.8	41.0	41.2	40.6	40.1	39.0	35.8	32.1	27.5	25.3	▲ 2.2
	Steel,Nonferrous Metals,Mining	42.9	41.8	41.5	41.2	40.4	39.8	38.1	37.6	36.3	32.9	29.0	23.6	21.5	▲ 2.1
	General Machinery	46.0	45.1	44.0	41.5	41.1	40.8	39.9	38.4	37.3	35.4	31.1	25.3	23.6	▲ 1.7
	Electrical Machinery	43.1	43.0	42.8	43.9	41.2	42.2	40.5	40.4	41.0	38.5	32.7	27.6	26.1	▲ 1.5
	Transportation Machinery, Equipment	48.1	47.5	46.4	43.4	42.3	43.5	41.2	40.9	39.4	36.5	34.2	22.2	18.2	▲ 4.0
	Precision Machinery, Medical Instruments and Equipment	44.4	42.4	43.9	43.4	42.0	41.3	42.0	39.9	40.4	39.0	34.8	27.2	26.3	▲ 0.9
	Other	40.2	40.2	38.0	40.7	41.8	37.4	38.4	38.0	36.9	36.8	31.1	20.7	19.8	▲ 0.9
	Total	42.9	42.0	41.5	41.4	40.6	40.3	39.6	38.6	37.6	34.9	30.3	24.7	23.0	▲ 1.7
	Food,BEWerages	40.8	40.4	38.8	39.0	38.8	38.1	37.9	37.4	37.3	33.1	25.6	21.3	21.0	▲ 0.3
	Textile, Textile Products, Clothing	33.2	31.6	29.8	30.8	31.6	28.8	28.8	26.5	26.2	22.0	16.4	10.3	11.4	1.1
	Construction Materials, Furniture,Ceramics, Stone and Clay Products	44.7	43.8	44.7	44.6	46.0	45.1	43.4	43.1	42.8	38.5	34.4	27.9	27.7	▲ 0.2
Wholesale	Paper Products, Stationery, Books	39.0	36.4	37.0	37.1	38.0	37.7	36.3	35.0	34.9	33.5	27.5	22.0	19.1	▲ 2.9
	Chemical	41.8	41.2	42.7	42.0	42.7	41.0	40.4	39.0	38.7	35.5	33.2	28.9	27.4	▲ 1.5
	Recycled Resources	40.2	37.1	32.8	32.8	30.6	34.8	29.0	33.3	30.8	27.1	21.2	18.7	18.8	0.1
	Steel,Nonferrous Metals, Mining Products	40.8	40.4	39.0	38.8	37.6	38.0	37.0	34.8	33.9	31.9	27.8	23.2	22.8	▲ 0.4
	Machinery,Equipment	44.2	44.4	43.8	43.3	44.6	42.7	42.3	41.7	41.2	38.2	33.0	25.9	25.1	▲ 0.8
	Other	40.6	40.6	40.2	40.2	40.7	37.9	37.6	37.1	36.7	31.5	26.5	21.4	19.8	▲ 1.6
	Total	41.9	41.4	41.0	40.8	41.4	39.9	39.3	38.4	37.9	34.4	29.4	23.7	23.0	▲ 0.7

		May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Ratio to tHM PrFDious Month
	Food, BEWerages	44.8	42.9	41.5	41.3	41.8	40.5	40.2	38.4	39.1	36.7	25.8	26.3	27.4	1.1
	Textile, Textile Products, Clothing	36.9	36.6	34.6	36.5	37.9	32.7	31.5	28.7	28.0	24.2	16.2	11.4	8.8	▲ 2.6
	Drugs,Sundries	41.0	38.5	40.0	37.7	40.6	35.8	37.3	40.2	37.7	34.7	27.5	28.7	25.3	▲ 3.4
	Furniture	39.6	48.5	40.9	45.0	53.0	33.3	26.9	31.8	31.9	29.2	22.6	10.8	15.5	4.7
Retail	Electrical Household Appliances, Information Machinery and Equipment	39.1	43.5	34.3	38.9	45.0	34.3	32.3	38.1	38.2	36.0	28.4	19.3	21.9	2.6
	Motor Vehicles, Motor Vehicle Parts	41.5	42.5	39.2	41.1	41.4	34.5	31.4	31.9	36.7	32.9	27.9	17.0	15.8	▲ 1.2
	Special Merchandise	41.3	41.1	40.6	40.7	43.5	38.2	39.1	36.0	35.2	34.7	27.4	20.2	19.9	▲ 0.3
	Various Merchandise	43.8	44.7	39.3	38.9	43.1	36.5	36.5	36.2	37.4	34.4	29.3	32.3	29.9	▲ 2.4
	Other	39.6	46.3	41.7	41.7	40.5	48.1	40.7	47.9	48.1	43.9	31.8	26.9	30.6	3.7
	Total	41.6	42.0	39.5	40.2	42.6	37.0	36.1	35.8	36.3	34.1	26.7	21.2	21.1	▲ 0.1
Transportatio	on,Warehousing	46.7	45.6	44.5	45.5	46.0	44.9	45.1	42.6	39.5	34.0	27.7	22.4	22.7	0.3
	Restaurants	40.6	42.9	39.6	38.1	43.6	37.3	39.4	40.7	41.0	32.3	14.2	4.3	5.5	1.2
	Postal, Telecommunications	56.7	60.0	58.3	60.6	56.9	56.1	59.5	52.8	64.6	57.1	50.0	30.3	33.3	3.0
	Electricity,Gas,Water,Heat	55.6	54.5	54.2	52.6	51.3	51.2	52.2	47.4	52.4	46.7	40.5	28.4	32.4	4.0
	Leasing,Rentals	50.9	52.5	51.8	51.7	53.5	54.5	53.1	50.4	50.8	46.9	34.0	27.8	29.1	1.3
	Lodging, Hotels	50.0	44.9	40.3	39.9	47.2	41.3	42.0	39.1	38.5	23.2	7.0	1.5	2.9	1.4
	Recreation	42.0	41.5	41.8	40.9	38.7	38.2	40.7	37.5	39.4	35.7	17.0	5.6	9.3	3.7
	Broadcasting	44.1	43.3	41.1	45.2	43.1	42.9	41.7	38.2	38.1	38.9	29.8	22.9	22.5	▲ 0.4
Service	Maintenance, Guarding, Testing	48.2	48.8	49.3	49.8	48.6	49.1	47.3	46.6	46.4	42.6	36.0	27.5	26.6	▲ 0.9
	Advertising	40.5	40.7	40.4	38.9	40.3	40.4	39.6	37.8	40.0	34.1	21.3	11.3	10.7	▲ 0.6
	Information	58.0	57.8	58.5	58.7	57.7	57.4	57.8	56.2	56.5	54.2	43.9	33.7	34.0	0.3
	Labor Dispatching	53.9	52.8	52.7	51.0	53.2	53.3	50.9	46.2	49.2	42.5	34.1	21.0	20.0	▲ 1.0
	Special Services	49.5	50.1	49.9	51.1	51.8	51.5	50.8	49.9	50.3	45.8	40.4	31.4	32.2	0.8
	Medical,Welfare,Public Health	47.8	47.0	48.7	46.5	47.3	46.5	48.5	47.7	47.8	43.2	35.9	26.4	26.1	▲ 0.3
	Education	43.6	44.0	41.1	39.5	40.0	42.4	37.8	43.1	41.4	40.0	29.7	13.9	18.8	4.9
	Other	47.9	48.5	47.9	48.3	48.4	47.9	47.9	45.6	46.2	39.8	29.2	21.2	21.8	0.6
	Total	50.6	50.8	50.8	50.7	51.0	50.6	50.4	48.8	49.5	45.1	35.3	25.8	26.1	0.3
Other		43.2	42.6	44.1	43.2	42.1	43.1	40.4	41.7	42.7	39.2	29.8	24.4	26.2	1.8

Economic Diffusion Index (Economic DI)2/2

	M ay- 19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Ratio to tHM PrFDious Month
Hokkaido	45.3	45.1	45.7	46.4	46.6	45.7	45.0	43.8	42.4	39.0	31.0	28.4	27.5	▲ 0.9
Tohoku	42.2	41.9	41.7	41.7	43.2	41.9	42.2	40.9	38.8	36.7	30.7	26.0	25.3	▲ 0.7
kitakanto	43.1	42.5	42.5	42.6	42.2	40.9	40.0	40.0	39.4	36.9	31.8	25.8	24.5	▲ 1.3
minamikanto	46.0	46.0	45.5	45.7	46.1	45.5	45.5	44.3	44.5	41.1	34.1	26.3	25.5	▲ 0.8
Hokuriku	44.6	44.2	43.5	44.1	43.5	42.1	40.4	39.5	37.6	35.6	29.7	24.9	25.1	0.2
Tokai	46.8	45.8	44.7	45.0	45.2	43.6	42.7	41.8	40.6	37.3	31.4	23.7	23.4	▲ 0.3
Kinki	45.0	44.6	44.0	43.8	43.9	42.2	41.9	40.5	39.8	36.3	30.4	23.9	23.8	▲ 0.1
Chugoku	45.6	45.5	45.0	44.8	45.0	44.0	43.6	42.6	41.2	39.0	33.8	27.0	25.7	▲ 1.3
Shikoku	46.7	44.8	43.1	43.8	43.9	44.4	44.0	43.8	42.7	39.5	36.4	30.8	28.5	▲ 2.3
Kyushu	46.9	47.0	47.6	46.3	47.1	46.5	46.8	45.1	45.2	41.5	35.3	27.5	27.4	▲ 0.1

Appendix

1.Research Subjects(Companies researched: 23,675; Valid responses: 11,979; Response rate: 50.6%)

Appendix

1.Region

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Hokkaido	596	Tokai	1,341
Tohoku	823	Kinki	2,010
kitaKanto	926	Chugoku	655
minamikanto	3,696	Shikoku	364
Hokuriku	665	Kyushu	903
		Total	11,979

2.Industry (10 Industries 51 Lines of business)

	Food
	Text
	Drug
Retail	Furr
(513)	Elect
	Moto
	Spec
	Vari
	Othe
Transportation	,Ware
	Rest
	Tele
	Elec
	Leas
	Lodg
	Recr
Service	Broa
(1,906)	Mair
	Adve
	Info
	Labo
	Spec
	Med
	Edu
	Othe
Otl	hers

	Food,Beverages	79
	Textile,Textile Products,Clothing	34
	Drugs,Sundries	27
Retail	Furniture	14
(513)	Electrical Household Appliances, Information Machinery and Equipment	45
	Motor Vehicles,Motor Vehicle Parts	96
	Special Merchandise	158
	Various Merchandise	48
	Others	12
insportation	n, Warehousing	508
	Restaurants	55
	Telecommunications	8
	Electricity,Gas,Water,Heat	18
	Leasing,Rentals	134
	Lodging, Hotels	34
	Recreation	63
Service	Broadcasting	17
(1,906)	Maintenance, Guarding, Testing	205
	Advertising	121
	Information	509
	Labor Dispatching	75
	Special Services	304
	Medical,Welfare,Public Health	132
	Education	31
	Others	200
iers		47
	Total	11,979

3.Size

υ.	DIZE		
	Large Firms	2,143	17.9%
	Small to Medium-sized Firms	9,836	82.1%
	micro Firms	3,509	29.3%
	Total	11,979	100.0%

2.Research Items

*Business Confidence (current, in 3 months, in 6 months, in 1 year) *Business Conditions (sales, purchasing and selling unit price, inventory, capacity utilization ratio, number of employees, overtime work hours)

3. Research Period and Methodology

Internet-based survey conducted May 18-31 2020

The explanation of the Economic Diffusion Index

Research Purpose/Researched Terms

TDB Economic Trend Research (started from May 2002) is a monthly statistical survey conducted for over 20,000 nationwide corporations on their general business activities including the current condition and future outlook of the industry business performance and operating climate. The primary purpose of such a survey is to assess the current state of Japan's economy.

Selection of the Subject Corporations

Companies of all sizes in all domestic industries are eligible to participate in the survey.

DI Calculation

The DI (Diffusion Index) is calculated by multiplying the number of responses for each assessment category by the number given in parentheses in the table below, to a seven-level assessment rated by companies.

Selection category	Extremely good	good	fairly good	neither good nor bad	fairly bad	bad	very bad
points	6	5	4	3	2	1	0
number of responses for each category	N ₆	N_5	N ₄	N ₃	N ₂	N ₁	N ₀

Economic DI

 $= \frac{\text{Total of (Points for each category} \times \text{Number of responses for each category})}{\times 1 \times 100}$ Number of valid responsesN 6

Small to Medium-Sized Firms Large Firms Industr (Micro Firms included)

Size Classification

		(more r mile moreday)	
Manufacturing and	Capital: More than 300 million yen	Capital: Below 300 million yen	
Other Industries*	and	or	No. of Employee: Below 20
	No. of Employee: Over 300	No. of Employee: Below 300	
Wholesale Trade	Capital: More than 100 million yen	Capital: Below 100 million yen	
	and	or	No. of Employee: Below 5
	No. of Employee: Over 100	No. of Employee: Below 100	
Retail Trade	Capital: More than 50 million yen	Capital: Below 50 million yen	
	and	or	No. of Employee: Below 5
	No. of Employee: Over 50	No. of Employee: Below 50	
Service**	Capital: More than 50 million yen	Capital: Below 50 million yen	
	and	or	No. of Employee: Below 5
	No. of Employee: Over 100	No. of Employee: Below 100	

An economic DI of 50 is the point separating good and bad, so a DI over

50 means "good," and below 50 means "bad," (The numbers are rounded

off to one decimal place.) No weight is given according to a company's size,

and calculations are made on the basis of "one company, one vote."

Note1: Large Firms refer to companies that rank in the top 3% in terms of sales volume according to the type of business, among small to midium-sized corporations excluding micro firms, which are defined in Small and Medium Enterprises Basic Act

Note2: Small to Medium-Sized Firms refer to companies that rank in the bottom 50% in terms of sales volume according to the type of business, among those not categorized as small to midium-sized corporations in Small to Medium-Sized Enterprises Basic Act

Micro Firms

 $\equiv \frac{\sum_{i=0}^{6} i \times N_i}{N} \times \frac{1}{6} \times 100$